

CLAIMS

I claim:

1. A method, comprising:

applying a layer of a dielectric material comprising fluorescent material on a first substrate comprising a conductor;

forming, with an imprinting tool, at least one trench at least partially through the dielectric material to the first substrate;

directing radiation in a first range of wavelengths from a radiation source to the trench; and

detecting radiation in a second range of wavelengths emitted from dielectric material at the bottom of the trench.
2. The method of claim 1, wherein the fluorescent material comprises less than about 10 percent of the dielectric material.
3. The method of claim 1, wherein the fluorescent material comprises less than about 2 percent of the dielectric material.
4. The method of claim 1, wherein the first range of wavelengths comprises a range of ultraviolet radiation.
5. The method of claim 1, wherein the second range of wavelengths comprises a range of visible light.
6. The method of claim 1, further comprising determining that formation of the trench has failed in response to detecting an intensity of radiation in the second range of

wavelengths emitted from dielectric material at the bottom of the trench in excess of a threshold intensity.

7. A method, comprising:

pressing an imprinting tool into a dielectric material comprising fluorescent material;

directing radiation in a first range of wavelengths from a radiation source to the imprinting tool; and

detecting radiation in a second range of wavelengths emitted from material on the imprinting tool.

8. The method of claim 7, wherein the first range of wavelengths comprises ultraviolet radiation.

9. The method of claim 7, wherein the second range of wavelengths comprises visible light.

10. The method of claim 7, further comprising maintaining the imprinting tool in response to detecting an intensity of radiation in the second range of wavelengths emitted from material on the imprinting tool in excess of a threshold intensity.

11. A device, comprising:

a first conductor;

a dielectric layer comprising fluorescent material on the first conductor, the dielectric layer having side walls that define boundaries of a trench through the dielectric layer;

a second conductor on the dielectric layer; and

conductive material that substantially fills the trench through the dielectric layer to form a via that electrically connects the first conductor and the second conductor.

12. The device of claim 11, wherein the fluorescent material comprises less than about 10 percent of the second dielectric layer.

13. The device of claim 11, wherein the fluorescent material comprises less than about 2 percent of the second dielectric layer.

14. The device of claim 11, wherein the dielectric layer has a thickness in a range of about 20 microns to about 50 microns.

15. The device of claim 11, wherein the dielectric layer, the first and second conductors, and the via comprise a substrate, and further comprising:

a die connected to the substrate;

a structural support connected to the substrate;

memory electrically coupled to the substrate; and

a mass storage unit.